

ANNEXURE - 5

NAME OF PROJECT:-PROJECT OF WIDENING AND STRENGTHENING OF TITHAL-VALSAD-DHARAMPUR ROAD K.M. 0/0 TO 31/4 (W/S 8/0 TO 31/4) TA. DIST. VALSAD

COST BENIFIT ANALYSIS

Sr. No.	Road	Taluka	Chainage	Length (m)	Width (m)	Area (Ha)
1	TITHAL VALSAD DHARAMPUR ROAD	Valsad	8/000 to 28/400	20000	8.625 (on LHS)	17.2500
			8/000 TO 28/400	20000	8.625 (on RHS)	17.2500
		Dharampur	28/400 To 31/400	3400	8.625 (on LHS)	2.9325
			28/400 To 31/400	3400	8.625 (on RHS)	2.9325
Total						40.365 Ha

Table B - Estimation of cost of forest diversion

Sr. No.	Parameter	Description
1	<p>Ecosystem services losses due to proposed forest diversion</p> <p>(Economic value of loss of eco system services due to proposed forest diversion has been taken as the "Net Present Value (NPV)" of the forest land being diverted as prescribed by the Central Govt. i.e. MoEF&CC. NPV rates taken as 4.38 lacs per Ha under Eco Class IV of Open Density Forest)</p>	<p>NPV towards 40.365 Ha of forest land works out as Rs. 176.799 Lacs(40.365 x 4.38 lacs = 176.799 Lacs)</p>

2	Loss of animal husbandry productivity, including loss of fodder	There will be no loss of productivity of livestock due to construction of the road. However as per MoEF guideline same has been taken as 10% of the NPV i.e. Rs. 17.68Lacs
3	Cost of human resettlement.	NIL As there is no displacement of people.
4	Loss of public facilities and administrative infrastructure	NIL No public and administrative facilities are affected.
5	Possession value of forest land diverted (Taken at 30% of NPV)	30% of NPV as per MoEF guideline is Rs. 53.04 Lacs
6	Cost of suffering to oustees	Nil As there is no displacement of people.
7	Habitat Fragmentation Cost (Taken as 50% of NPV)	50% of NPV as per MoEF guideline is Rs. 88.399 Lacs
8	Compensatory afforestation and soil conservation cost (Arrived at Rs. 2,00,000/- per Ha for double degraded area i.e. 2.708 Ha.)	Rs. 2.0 Lacs/Ha for CA and soil and moisture conservation cost = $2.0 \times (40.365 \times 2)$ = 161.46Lacs
Total Cost		Rs. 497.378 Lacs

Table C – Estimation of Benefits of forest diversion


Sr. No.	Parameter	Description
1	Increase in productivity attributed to the project	Cost of the Road is 2250 Lacs . The project would result in substantial financial and social benefits. Increase saving shall accrue in vehicle operating and travel costs. The trading of this region will get a tremendous boost.

2	Benefits to the economy to the specific project.	2250 Lacs By infusion of 2250Lacs , various sectors like manufacturing industry, manpower, engineering, transportation etc. will get benefitted. Since this figure has already been considered in Sr. no. 1, this is not added to the total benefits.
3	No. of population benefitted due to specific project	The talukas and villages near Valsad and nearby districts shall be benefitted.
4	Economic benefits due to direct and indirect employment due to project.	Approx 33000 man days employment
5	Economic benefits due to compensatory afforestation	= 2.00 Lacs/Ha x (40.365 x 2) = 161.46 Lacs
Total Benefit		Rs. 2411.46Lacs

Cost Benefit Ratio = Total Environment and Forest loss : Project Benefit

Cost Benefit Ratio = Rs. 497.378 Lacs : Rs. 2411.46Lacs

Cost Benefit Ratio = 1 : 4.848


DEPUTY EXECUTIVE ENGINEER
VALSAD (R&B) SUB DIVISION
VALSAD


EXECUTIVE ENGINEER
VALSAD (R&B) DIVISION
VALSAD